



NEURO SWING-CLASSIC



NEURO SWING

NEURO SWING 2

NEURO HiSWING

NEURO HiSWING R+

NEURO SWING Carbon

	Dorsiflexion Stop	Plantar Flexion Stop
Main Function	 <p>dynamic</p>	 <p>dynamic (with dorsiflexion assist)</p>
Adjustment Options	<p>adjustable, variable spring force by exchanging the spring unit</p>	<p>adjustable, variable spring force by exchanging the spring unit</p>

The NEURO SWING Carbon is a water-resistant ultralight system ankle joint made of carbon fibre-reinforced plastics.

An orthosis with a NEURO SWING Carbon system ankle joint can be converted into an orthosis with a NEURO CLASSIC Carbon system ankle joint by exchanging the system joint.



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12mm

14mm

16mm

20mm

Joint Dimensions [mm]

Dimension	Description	System Width a			
		12mm	14mm	16mm	20mm
b	joint head width	51	60	74	84
c	joint height	51	58	71	83
	joint thickness	15	17	20	22.5

Joint Weights* [g]

Material	Unit	System Width			
		12mm	14mm	16mm	20mm
carbon	piece	23	34	64	94

* without spring units



The NEURO SWING Carbon system ankle joint is delivered with the following articles:

- set 2-component adhesive and primer
- orthosis joint grease, 3g
- assembly/lamination dummy

- ➔ Please order spring units, system stirrups and system anchors separately.
- ➔ You will find spring units on catalogue page C60.6
- ➔ You will find system stirrups on catalogue page C60.9f.
- ➔ You will find special system anchors for the NEURO SWING Carbon on catalogue page J9ff.

C60.3



straight
fig. 1

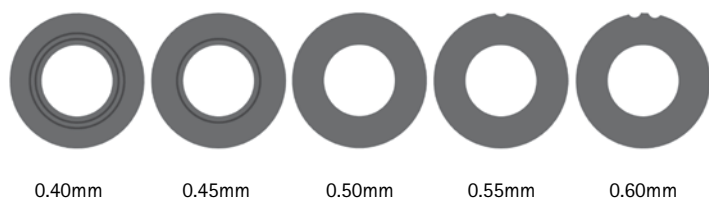
Straight (Fig. 1)						
Material	Leg	Unit	Article Number for System Width			
			12mm	14mm	16mm	20mm
carbon	left or right	piece	SF5201-C/LR	SF5202-C/LR	SF5203-C/LR	SF5205-C/LR



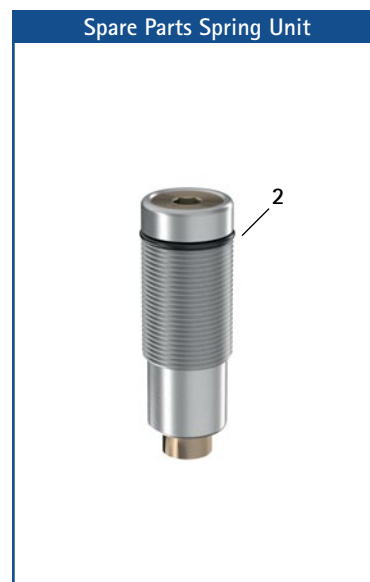
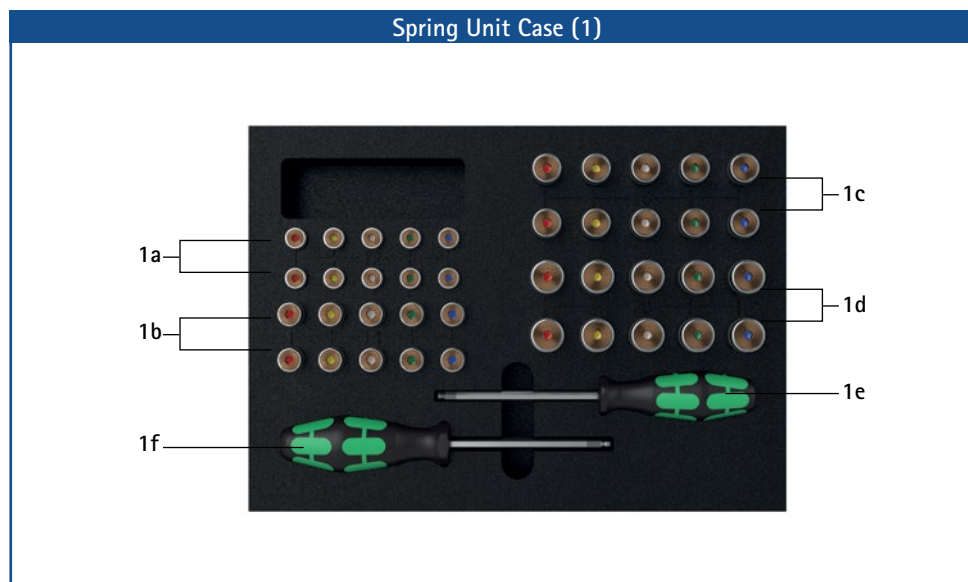
Spare Parts					
Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
1	SF0591-C/1	SF0592-C/1	SF0593-C/1	SF0595-C/1	bearing nut
2	SF0501-C	SF0502-C	SF0503-C	SF0505-C	joint case
3	GS1409-*	GS1911-*	GS2413-*	GS2815-*	sliding washer*
4	SF0591-C/2	SF0592-C/2	SF0593-C/2	SF0595-C/2	cover disc
5	SC1404-L10	SC1405-L11	SC1406-L14	SC1406-L14	countersunk flat head screw with hexalobular socket

* Sliding Washers				
	Article Number for System Width			
	12mm	14mm	16mm	20mm
	Ø = 14mm	Ø = 19mm	Ø = 24mm	Ø = 28mm
GS1409-040	GS1911-040	GS2413-040	GS2815-040	
GS1409-045	GS1911-045	GS2413-045	GS2815-045	
GS1409-050	GS1911-050	GS2413-050	GS2815-050	
GS1409-055	GS1911-055	GS2413-055	GS2815-055	
GS1409-060	GS1911-060	GS2413-060	GS2815-060	

The last three digits of the article number stand for the thickness of the sliding washer, e.g. GS1409-040. The thickness of this sliding washer is 0.40mm. In total, the sliding washers are available in five different thicknesses. The thickness of a sliding washer is indicated by the markings. For example, a sliding washer with two notches is 0.40mm thick, whereas a sliding washer with one notch is 0.55mm thick. Please use the sliding washer centring pin to position the sliding washers.



- ➔ You will find system stirrups on catalogue page C60.9f.
- ➔ You will find system anchors on catalogue page J9ff.
- ➔ You will find the sliding washer centring pin on catalogue page K11.



Spring Unit Case		
Item	Article Number	Description
1	SF5800-C	1 x spring unit set in a case with tools
w/o fig.	SF5800-C/0	1 x spring unit case for filling by yourself, with tools (without spring units)
1a	see table spring units	2 x of each blue, green, white, yellow and red spring unit for NEURO SWING Carbon 12mm
1b	see table spring units	2 x of each blue, green, white, yellow and red spring unit for NEURO SWING Carbon 14mm
1c	see table spring units	2 x of each blue, green, white, yellow and red spring unit for NEURO SWING Carbon 16mm
1d	see table spring units	2 x of each blue, green, white, yellow and red spring unit for NEURO SWING Carbon 20mm
1e	WZ5112-4010	1 x hexagonal screwdriver with spherical head, 4 x 100mm
1f	WZ5112-5010	1 x hexagonal screwdriver with spherical head, 5 x 100mm

Spring Units (You Need Two of the Following Spring Units for One NEURO SWING Carbon System Ankle Joint):						
	Article Number for System Width				Description	Unit
	12mm	14mm	16mm	20mm		
SF5801-C/15/03	SF5802-C/15/05	SF5803-C/15/07	SF5805-C/15/18	spring unit, blue, normal, max. 15° range of motion	piece	
SF5801-C/15/06	SF5802-C/15/11	SF5803-C/15/15	SF5805-C/15/25	spring unit, green, medium, max. 15° range of motion	piece	
SF5801-C/10/12	SF5802-C/09/16	SF5803-C/10/21	SF5805-C/10/40	spring unit, white, strong, max. 10° range of motion	piece	
SF5801-C/10/19	SF5802-C/10/29	SF5803-C/10/31	SF5805-C/10/60	spring unit, yellow, very strong, max. 10° range of motion	piece	
SF5801-C/05/33	SF5802-C/05/53	SF5803-C/05/63	SF5805-C/05/99	spring unit, red, extra strong, max. 5° range of motion	piece	

Static Dorsiflexion Stop						
Item	Article Number for System Width				Description	Unit
	12mm	14mm	16mm	20mm		
w/o fig.	-	-	SF5803-C/0	SF5805-C/0	static dorsiflexion stop, black, 0° range of motion	piece

Spare Parts Spring Units and Static Dorsiflexion Stop						
Item	Article Number for System Width				Description	
	12mm	14mm	16mm	20mm		
2	VE3771-085/13	VE3771-100/12	VE3771-12/12	VE3771-140/15	O-ring for securing the spring unit and static dorsiflexion stop*	

* An additional O-ring is part of the scope of delivery of the spring units and static dorsiflexion stop.

NEURO SWING-CLASSIC

Weights Spring Units and Static Dorsiflexion Stop [g]						
Spring Unit	Article Number	System Width				
		12mm	14mm	16mm	20mm	
spring unit, blue, normal, max. 15° range of motion	see table spring units	12	19	33	64	
spring unit, green, medium, max. 15° range of motion	see table spring units	14	25	43	69	
spring unit, white, strong, max. 10° range of motion	see table spring units	17	29	48	78	
spring unit, yellow, very strong, max. 10° range of motion	see table spring units	18	29	47	86	
spring unit, red, extra strong, max. 5° range of motion	see table spring units	18	28	49	86	
static dorsiflexion stop, black, 0° range of motion	see table static dorsiflexion stop	-	-	33	54	

NEURO SWING

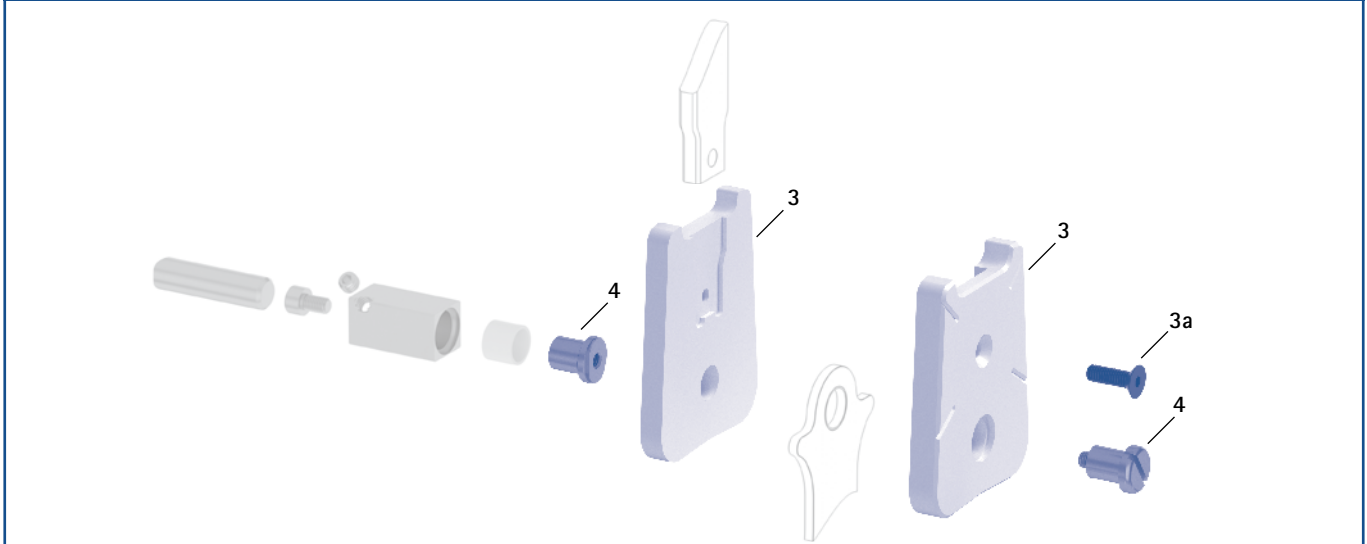
NEURO SWING 2

NEURO HiSWING

NEURO HiSWING R+

NEURO SWING Carbon

Assembly/Lamination Dummies and Joint Retainers



Assembly/Lamination Dummies and Joint Retainers

Item	Article Number for System Width				Description	Unit
	12mm	14mm	16mm	20mm		
3	SF0951-C/LR1	SF0952-C/LR1	SF0953-C/LR1	SF0955-C/LR1	assembly/lamination dummy, two parts (2 dummies with screw)	set
3a	SC1054-L12	SC1055-L12	SC1055-L16	SC1055-L16	countersunk flat head screw with hexagon socket	piece
4	PE1011-01/LR	PE1012-LR	PE1025-LR	PE1025-LR	joint retainer	piece
	2/Z	4/B	7/C	7/C	laser marking	-

- ➔ Assembly/lamination dummies are included in the scope of delivery of the system joints.
- ➔ You will find an overview of our tools on catalogue page K1ff.
- ➔ You will also find the joint retainers and the corresponding laser markings in the tool case on the catalogue pages K13 and K14.

NEURO SWING-CLASSIC

NEURO SWING



rivet stirrup



lamination/prepreg stirrup



thermoformage stirrup



side view

NEURO SWING 2

General Measures of the System Stirrups

Measure [mm]	System Width			
	12mm	14mm	16mm	20mm
thickness	2.0	2.5	3.0	3.0
neck width	19.3	23.2	26.6	30.8
bore hole diameter	8.5	10.5	12.0	14.0

NEURO HiSWING

Bent

Description	Leg/Leg Side	Unit	Article Number and Measures for System Width			
			12mm	14mm	16mm	20mm
rivet stirrup	left or right	piece	FC5071-LR/ST3	FC5082-LR/ST4	FC5093-LR/ST4	FC5095-LR/ST5
length from the middle of the bore hole [mm]			116.3	124	144	164
weight [g]			41	66	111	139
lamination/prepreg stirrup	left lateral or right medial	piece	FC5171-L/ST1	FC5182-L/ST1	FC5193-L/ST1	FC5195-L/ST1
	left medial or right lateral		FC5171-R/ST1	FC5182-R/ST1	FC5193-R/ST1	FC5195-R/ST1
length from the middle of the bore hole [mm]			43.3	49.7	57.9	68.3
weight [g]			15	30	51	68
thermoformage stirrup	left or right	piece	FC5271-LR/ST2	FC5282-LR/ST2	FC5293-LR/ST2	FC5295-LR/ST3
length from the middle of the bore hole [mm]			58.2	61	67	73
weight [g]			19	32	51	64

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rivet stirrup



lamination/prepreg stirrup

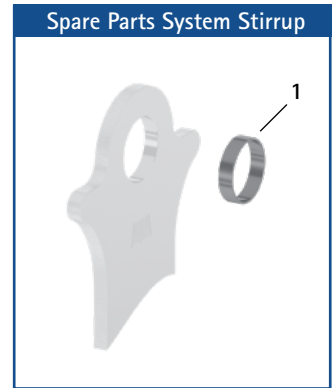


thermoformage stirrup

Straight					
Description	Unit	Article Number and Measures for System Width			
		12mm	14mm	16mm	20mm
rivet stirrup	piece	FB5071-C/ST/3	FB5082-C/ST/4	FB5093-C/ST/4	FB5095-C/ST/5
length from the middle of the bore hole [mm]		117.3	125	145	165
weight [g]		41	66	111	139
lamination/prepreg stirrup	piece	FB5171-C/ST/1	FB5182-C/ST/1	FB5193-C/ST/1	FB5195-C/ST/1
length from the middle of the bore hole [mm]		44.3	50.7	58.9	69.3
weight [g]		15	30	51	68
thermoformage stirrup	piece	FB5271-C/ST/2	FB5282-C/ST/2	FB5293-C/ST/2	FB5295-C/ST/3
length from the middle of the bore hole [mm]		59.2	62	68	74
weight [g]		19	32	51	64

Spare Parts System Stirrup					
Item	Article Number for System Width				Description
	12mm	14mm	16mm	20mm	
1	BR1009-L020	BR1211-L025	BR1312-L030	BR1514-L030	sliding bushing

→ All system stirrups of the NEURO SWING Carbon system ankle joint are delivered with an integrated sliding bushing.



Information for Processing

Rivet Stirrup:
 → This system stirrup is riveted to the foot piece.

Lamination/Prepreg Stirrup:
 → This system stirrup is embedded into the laminate of the foot piece.

Thermoformage Stirrup:
 → This system stirrup is embedded into thermoformable plastics, but can be embedded into laminates as well.



→ The system stirrup is marked with lines in the neck area in order to read the joint angle.